DD-6200
Double Cassette Deck
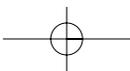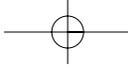
Sherwood

Sherwood

DD-6200
Double Cassette Deck

CE

Introduction

READ THIS BEFORE OPERATING YOUR UNIT

|	
CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING : **TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE·**

FOR YOUR SAFETY		
EUROPE AUSTRALIA	**220 V - 240 V**	Units shipped to Australia are designed for operation on 240 V AC only. To ensure safe operation, the three-pin plug supplied must be inserted only into a standard three-pin power point which is effectively earthed through the normal household wiring. Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Improper extension cords are a major cause of fatalities. The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician. PAN-EUROPEAN UNIFIED VOLTAGE All units are suitable for use on supplies 220-240 V AC.

CAUTION

- Leave a space around the unit for sufficient ventilation.
- Avoid installation in extremely hot or cold locations, or in an area that is exposed to direct sunlight or heating equipment.
- Keep the unit free from moisture, water, and dust.
- Do not let foreign objects in the unit.
- The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- No naked flame sources, such as lighted candles, should be placed on the unit.
- Please be care the environmental aspects of battery disposal.
- The unit shall not be exposed to dripping or splashing for use.
- No objects filled with liquids, such as vases, shall be placed on the unit.
- Do not let insecticides, benzene, and thinner come in contact with the set.
- Never disassemble or modify the unit in any way.
- ■ Notes on the AC power cord and the wall outlet.
- The unit is not disconnected from the AC power source(mains) as long as it is connected to the wall outlet, even if the unit has been turned off.
- When disconnecting the power cord from the wall outlet, always pull the plug, not the power cord.
- Disconnect the plug from the wall outlet when not using the unit for long periods of time.
- The wall outlet shall be installed near the unit and shall be easily accessible.

Note on recycling
This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations.
When discarding the unit, comply with local rules or regulations.
Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning chemical waste.
This product and the accessories packed together constitute the applicable product according to the WEEE directive except batteries.
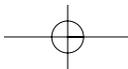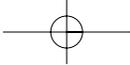
CONTENTS
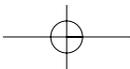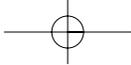
Rear Panel Connections

- Do not plug the AC input cord into the AC outlet when making connections.
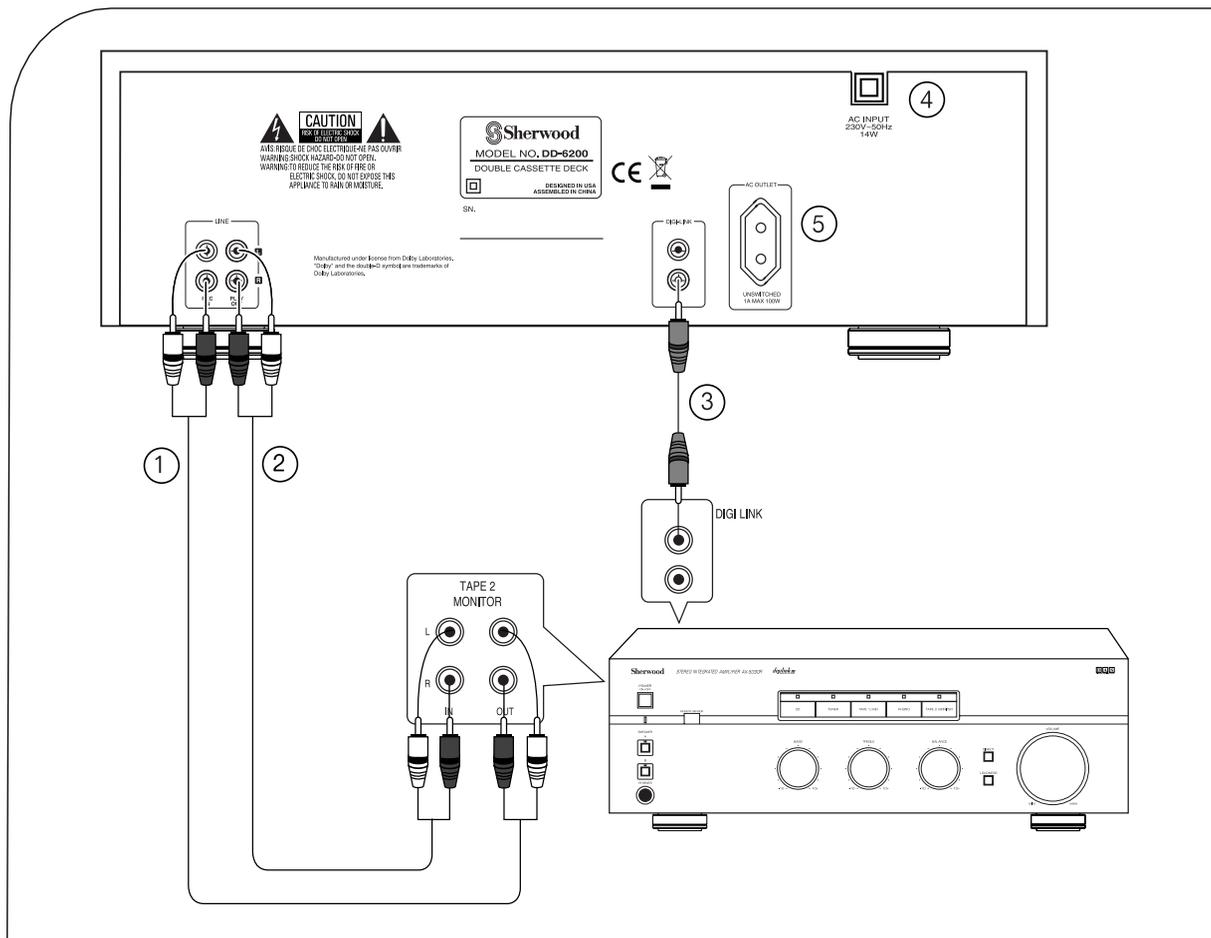- Be sure to connect the white plugs to the L(Left) and the red plugs to the R(Right) jacks when making connections.
- Refer to the connecting diagram in the operating instructions of AMPLIFIER/RECEIVER.

① **REC INPUT JACKS**
Connect the cords between the REC INPUT jacks of this unit and the REC OUTPUT jacks of your amplifier.

② **PLAY OUTPUT JACKS**
Connect the cords between the PLAY OUTPUT jacks of this unit and the PLAY INPUT jacks of your amplifier.

③ **DIGI LINK JACKS**
Connect this jack to the DIGI LINK jack of Sherwood amplifier/receiver bearing the DIGI LINK III or II logo to control this unit remotely by DIGI LINK system.
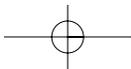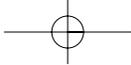
④ **AC INPUT CORD**
Plug this cord into the switched AC outlet of amplifier or a wall AC outlet.
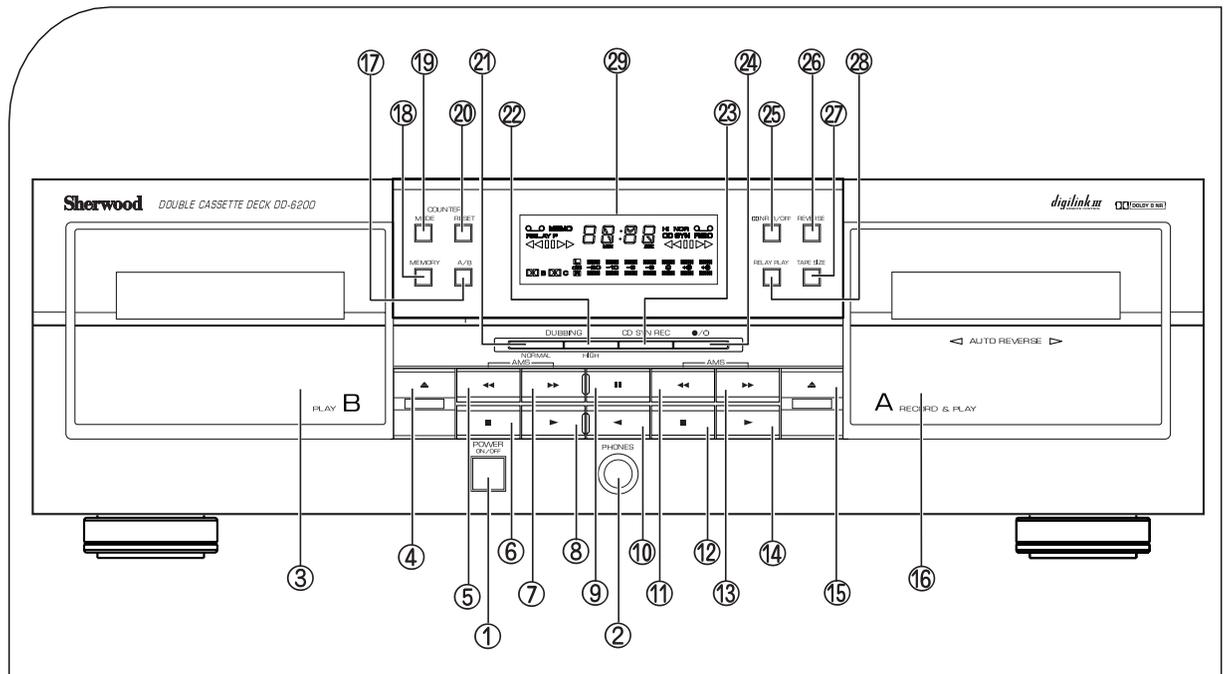
⑤ **UNSWITCHED AC OUTLET**
Power always flows to this outlet, regardless of whether this unit is switched ON or OFF if power flows through the AC input cord of this unit.

Note : The equipment whose power consumption exceeds 100 watts should not be connected.

Front Panel Controls

① **POWER SWITCH**
  Press this switch to turn the power on and press again to turn the power off.
  For system operation, plug the AC input cord into the switched AC outlet on amplifier or receiver, keep the
  POWER switch ON and control power ON/OFF with the power operation on the amplifier or receiver.

② **HEADPHONE JACK**
  Stereo headphones with a standard 1/4 inch plug can be plugged into this jack for private listening.

③ **CASSETTE DOOR**
  Press the EJECT button of the corresponding DECK to open the cassette door when the deck is in the stop
  mode.

  ※ Number 3 ~8 buttons will function for Deck B operation only and Number 9 ~ 16 buttons for Deck A
    operation only.

④ **EJECT BUTTON(▲)**
  Press this button to open the cassette door.
  To close the cassette door, push the door gently until it clicks.

⑤, ⑦ **FAST FORWARD and REWIND BUTTONS(▶▶ and ◀◀)**
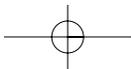 Press the button to advance or rewind the tape rapidly.
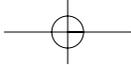 For the AMS (Automatic Music Search) function, press the button during playback.

⑥ **STOP BUTTON(■)**
  Press this button to stop playing or recording, etc..

⑧ **FORWARD PLAY BUTTON(▶)**
  Press this button to playback the front side of the tape.

⑨ **PAUSE BUTTON(‖)**
Press this button to temporarily stop playing back or recording.
To restart, press the PLAY button.

⑩ **REVERSE PLAY BUTTON(◀)**
Press this button to play back the back side of the tape.

⑪, ⑬ **FAST FORWARD and REWIND BUTTONS(▶▶ and ◀◀)**

⑫ **STOP BUTTON(■)**

⑭ **FORWARD PLAY BUTTON(▶)**

⑮ **EJECT BUTTON(▲)**

⑯ **CASSETTE DOOR**

⑰ **DECK A/B COUNTER SELECTOR BUTTON**
Press this button to select the deck to be counted.

⑱ **MEMORY BUTTON**
Press this button to memorize the specific point on the tape.

⑲ **COUNTER MODE BUTTON**
Press this button to select the tape or time counter mode.

⑳ **COUNTER RESET BUTTON**
Press this button to reset the counter to "0000" or "00 min. 00 sec.".

㉑ **NORMAL SPEED DUBBING BUTTON**
Press this button to set to normal speed dubbing mode.

㉒ **HIGH SPEED DUBBING BUTTON**
Press this button to set to high speed dubbing mode.

㉓ **CD SYNCHRO RECORDING BUTTON**
Press this button to use the CD SYNCHRO RECORDING function.

㉔ **RECORD/RECORD MUTE BUTTON(●/○) (DECK A only)**
Press this button to enter the recording pause mode. To start recording, press the FORWARD PLAY or REVERSE PLAY button.

㉕ **◻◻ NR B/OFF BUTTON**
Press this button to select the Dolby B NR or the Dolby NR OFF mode while playing back or recording.

㉖ **REVERSE MODE BUTTON**
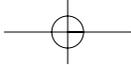Press this button to select the desired reverse mode while playing back or recording.

㉗ **TAPE SIZE BUTTON**
Press this button to select the tape length for displaying the elapsed time while playing back or recording.
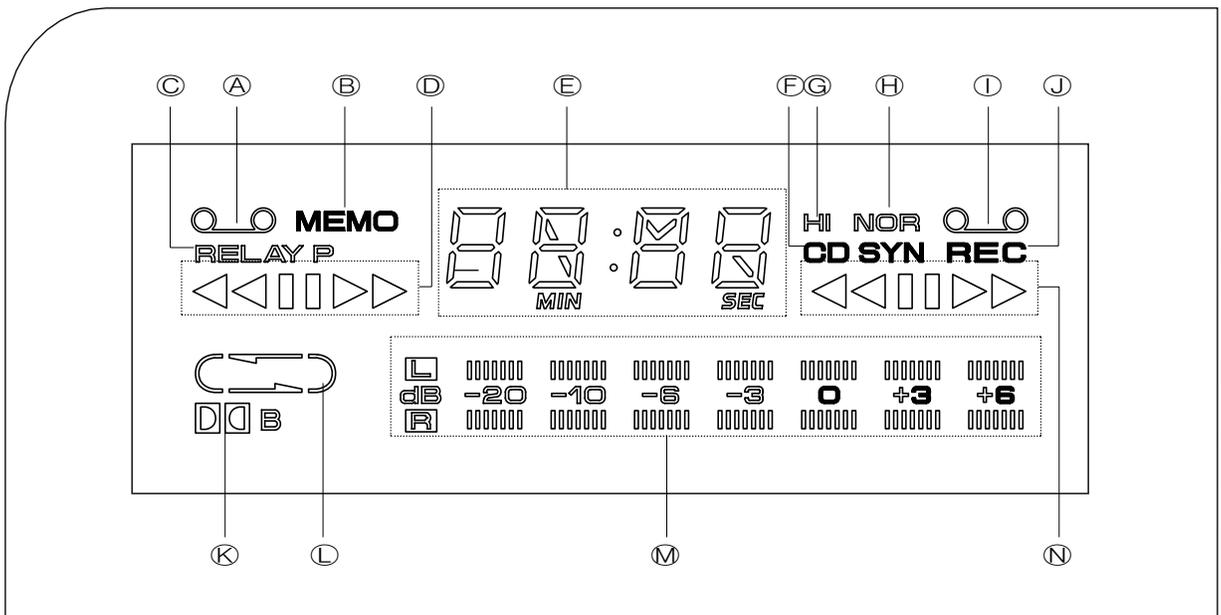
㉘ **RELAY PLAY BUTTON**
Press this button to continue to play from Deck A to Deck B or vice versa.
Use this function with the REVERSE MODE button.
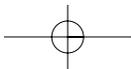
㉙ **FLUORESCENT DISPLAY**

Ⓐ DECK B TAPE DETECTION INDICATOR
Ⓑ MEMORY INDICATOR
Ⓒ RELAY PLAY INDICATOR
Ⓓ DECK B TAPE DIRECTION DISPLAY
Ⓔ COUNTER DISPLAY
Ⓕ CD SYNCHRO RECORDING INDICATOR
Ⓖ HI SPEED DUBBING INDICATOR

Ⓗ NORMAL SPEED DUBBING INDICATOR
Ⓘ DECK A TAPE DETECTION INDICATOR
Ⓙ RECORDING INDICATOR
Ⓚ DOLBY B NR INDICATOR
Ⓛ REVERSE MODE INDICATOR
Ⓜ LEVEL METER DISPLAY
Ⓝ DECK A TAPE DIRECTION DISPLAY

※ **DIGI LINK SYSTEM REMOTE CONTROL**
 This unit can be remotely controlled with Sherwood DIGI LINK III amplifier or receiver.
• For available functions, refer to the compatible unit's operating instructions.
• To listen to tapes by DIGI LINK system, first make DIGI LINK connection between this unit and Sherwood compatible amplifier or receiver.
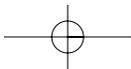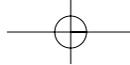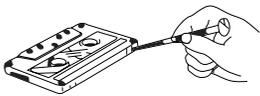
Before Operation

■ NOTES ON CASSETTE TAPE

• Before loading a cassette tape, take up the slack in the tape to prevent it from becoming entangled around the capstan.

• After the recording has been finished, remove the tab to prevent the recorded contents from being erased or recorded on accidently.

• To rerecord after tabs have been removed, cover with adhesive tape.

• Do not store the tapes in direct sunlight or near equipment that generates heat. Keep the tapes away from any magnetic fields.
• Do not touch the tape surface and store the tapes in their cases after use. Dust can cause contamination of the heads resulting in noise.

■ CLEANING THE HEAD SECTION

• For the best condition of the deck, always keep the head (recording/playback/erase), capstan and pinch roller clean.

To clean them as follows;
1. Open the cassette door.
2. Clean the heads with the cotton swab dipped in commercially available head cleaner.
3. Clean the capstan and pinch roller with another cotton swab dipped in commercially available rubber cleaner.

Cotton swab

Pinch roller   Capstan

Recording /
playback head
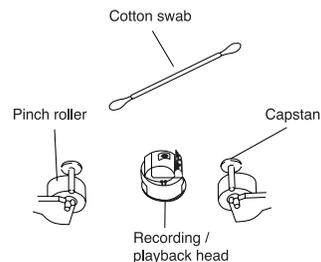
■ DEMAGNETIZING THE HEAD

When the recording/playback head is magnetized, the sound quality will be deteriorated.
In this case, demagnetize the head using a commercially available demagnetizer.

■ PRINCIPLE OF DOLBY B NR SYSTEM

The Dolby NR system functions so that it automatically increases recording levels of medium and high frequencies when the recording signal level is lower than the specified level(encoding), and automatically reduces the output level to the normal level during playback(decoding). In this way, the tape hissing noise is remarkably reduced without affecting the sound quality. The Dolby B NR system used in your Cassette Deck improves S/N ratio by about 5 dB at 1 kHz and about 10 dB at 10 kHz.

※ Manufactured under license from Dolby Laboratories.
"Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

■ AUTO TAPE SELECTOR

The type of tape loaded is detected automatically by the auto tape selector and recording bias and equalization are set automatically according to the characteristic of that tape such as NORMAL or CrO_2 tape.

Note : Do not use the metal tapes because these tapes are not played back and recorded correctly.
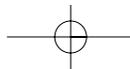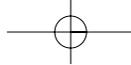
Operations

PLAYING BACK TAPES

Note : Do not use the metal tapes because these are not played back and recorded correctly.
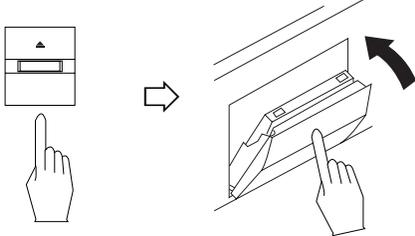

POWER
ON/OFF

1 Press the POWER swith to turn the power on.

• Do not turn the power off while operating the unit. In this case, the tape door may not be opened.

---

2 Load the tape with the bottom side up and to close the cassette door, push the door gently until it clicks.

• Only in the stop mode, the door can be opened.
• According to the type of the tape loaded, the corresponding type is shown by the auto tape selector as follows (Deck A only) ;
 "NOR" : Normal tape.
 "CR" : Chrome(CrO₂) tape.
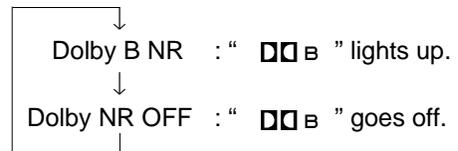• For details, refer to "AUTO TAPE SELECTOR" on page 7.

3 In case of the tape recorded with Dolby B NR, select the Dolby B NR mode.

NR B/OFF

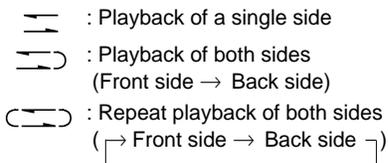• Each time this button is pressed, Dolby B NR or Dolby NR OFF mode is selected as follows;

Dolby B NR : " ◻◻ B " lights up.

Dolby NR OFF : " ◻◻ B " goes off.

---

4 Select the desired reverse mode.

REVERSE

• Each time this button is pressed, the reverse mode is selected as follows ;

 ⎯ : Playback of a single side
 ⎯⊃ : Playback of both sides
  (Front side → Back side)
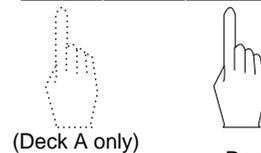 ⊂⎯⊃ : Repeat playback of both sides
  (⌐→ Front side → Back side ⌐)

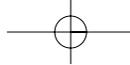• On the Deck B, the front side can be played back regardless of the reverse mode.

5 Start playback.

Back side ⌐ ⌐ Front side

◄ ■ ►

(Deck A only)

Deck A tape detection indicator

Tape counter

```
0027
```
▷

L dB -20 -10 -6 -3 0 +3 +6
◻◻ B
R

Dolby B NR indicator   Reverse mode   Level meter   Playback mode

6 To temporarily stop playback.
(Deck A only)

| ❙❙ |

- " ❙❙ " indicator lights up.
- To restart playback, press the corresponding PLAY button.

7 To stop playback.

| ■ |

8 To rapidly advance or rewind the tape, press the corresponding button in the stop mode.

AMS
| ◄◄ | ►► |

- At the desired point, press the STOP or corresponding PLAY button.

AMS(Automatic Music Search) PLAY

- The automatic music search function automatically skips other musics, finds and starts playback from the desired music.
- Up to 20th music before or after the current music can be searched quickly.
- During playback, press the button the desired number of times.

Example) When listening to the second music before or after the current music.

AMS
| ◄◄ | ►► |

$P - 02$

B dB -20 -10 -6 -3 0 +3 +6

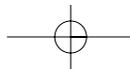- The second music can be searched quickly and played back.
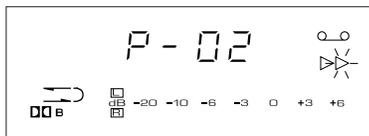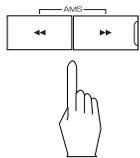
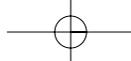※ Automatic music search function might not operates as expected if :
- The length of the blank space between two musics is less than 4 seconds.
- The noise level of the blank space is very high.
- The overall recorded volume level of a music is very low.

RELAY PLAY

1 Load the tapes into Deck A and B and press the RELAY PLAY button.

RELAY PLAY
| ☐ |

- "RELAY P" lights up.
- To cancel the relay play, press this button.

2 Press the PLAY button.

| ◄ | ■ | ► |

(Deck A only)

- According to the PLAY button on the selected deck and the reverse mode, the relay play performs as follows :

  ⊏⊐ : Deck A (Front or Back side)⌐ or ⌐ Deck B (Front side) ⌐
  　　　 Deck B (Front side) ⌐   Deck A (Front side) ⌐

  ⊏⊃ : Deck A (Front side → Back side) ⌐ or ⌐ Deck B (Front side)
  　　　 Deck B (Front side) ⌐   → Deck A (Front side → Back side)

  ⊂⊐ : ⌐→ Deck A (Front side → Back side)⌐
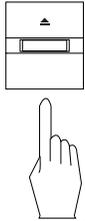 　　　 Deck B (Front side) ⌐

RECORDING

1 Load a tape to be recorded into deck A.

• Be sure the erase-protection taps on the tape are in place.
• The type of tape(normal or chrome) is automatically detected.
• The metal tapes are not recorded correctely.

2 Select the reverse mode.

REVERSE

⥦ : Recording of a single side.
⊂⥦⊃ , ⥦⊃ : Recording of both side.

• When selecting recording of both sides and recording first on the back side, recording is made only on that side.

3 When recording with Dolby B NR, select the Dolby B NR mode.

□□NR B/OFF
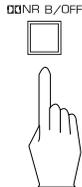
4 Select the program source to be recorded.
Example) When selecting the tuner.

5 Press the RECORD/RECORD MUTE button to enter the recording pause mode

●/○
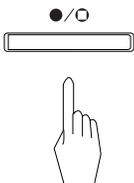
• According as there are the erase-protection taps or not, the PLAY indicators are flickering as follows ;

◁□□▷ : Recordable on both sides.

□□▷ : Recordable on front side.

◁□□ : Recordable on back side.

6 Press the PLAY button to start recording.

◄ ■ ►
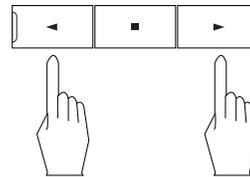
7 To temporarily stop recording.

■

• To restart recording, press the corresponding PLAY button.

8 To make a blank space, press the RECORD/RECORD MUTE button in the recording pause mode or during recording.

●/○

• The unit will make a 4 second blank space and then enter the recording pause mode.
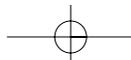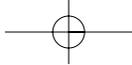
9 To stop recording.

CD SYNCHRO RECORDING

• When this unit is connected to a Sherwood compatible CD player controlled remotely by the DIGI LINK III system, the CD synchro recording can be performed.

1 Do the steps 1, 2 and 3 in "RECORDING" procedure.

2 According to the tape length, edit the tracks to be recorded on the CD player referring to the operating instructions of that.

3 Start CD synchro recording.

CD SYN REC

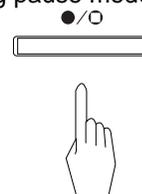4 To stop CD synchro recording.
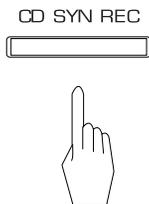
• The CD is selected automatically on the amplifier bearing the DIGI LINK III logo.
• If 8 seconds elapses after starting recording, the CD player starts automatically.
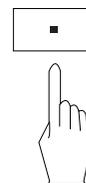
• During CD synchro recording, only the STOP button of the Deck A function buttons does work.

■ **Notes**

• Because CD synchro recording starts from the front side, if there is not the erase-protection tap on that side, CD synchro recording can not be performed.
• During CD synchro recording, if other program source on the amplifier is selected, the unit stops CD synchro recording and starts recording the selected program source.
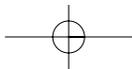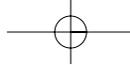
DUBBING FROM DECK B TO DECK A

1 Open the cassette door by pressing the EJECT button and load a blank tape into Deck A and prerecorded tape into Deck B respectively.

DUBBING

NORMAL   HIGH

• Because dubbing starts from the front side, if there is not the erase - protection tap on that side, dubbing can not be performed.

2 Start dubbing.
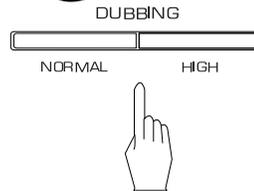
• NORMAL : Normal speed dubbing.
• HIGH : 1.5 times as fast as normal speed dubbing.

• For better sound quality, select the normal speed dubbing mode.
• During dubbing, the tape is recorded in accordance with the recording condition of the tape to be played regardless of the Dolby NR mode.

3 To stop dubbing.
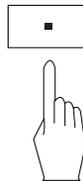
• During dubbing, only the STOP button of the deck function buttons does work.

COUNTER DISPLAY

Selecting a counter mode

• There are two kinds of counter mode : tape counter, time counter for displaying the elapsed playing or recording time.
• Select the desired counter mode.
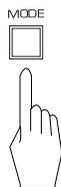
MODE

• Each time this button is pressed, the counter mode changes as follows ;

0127   : Tape counter mode

00:13   : Time counter mode
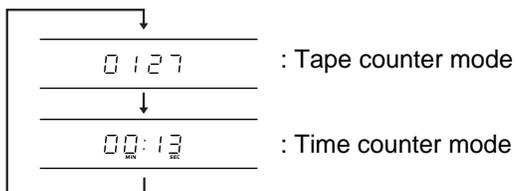
Selecting a tape length

• Select the corresponding tape length according to the loaded tape in the time counter mode.
Example) When selecting the 60 minutes as tape length.

TAPE SIZE

C - 60
↓
00:17
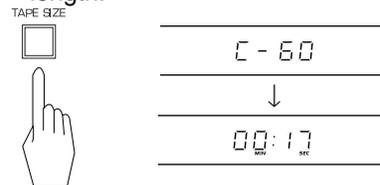
• Each time this button is pressed, the tape length changes as follows ;

C-60 → C-90 → C 120
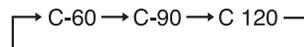
• During playing or recording, the elapsed playing or recording time is displayed.
• The time counter is not actually a clock, so the displayed time is not exactly equal to the actual elapsed time.
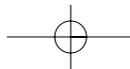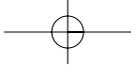
Resetting the counter

- In each counter mode, you can reset the counter to "0000" or "00 min. 00 sec.".
  Example) In the tape counter mode.

RESET
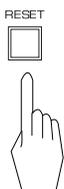
1234 → 0000

Selecting the desired deck counter mode

- Select the Deck A or the Deck B counter mode as desired.

A/B

- " ⬭ " of the selected deck is flickering for 3 seconds and the corresponding deck counter mode is displayed.
- When the unit is in the stop mode displaying a deck counter mode, playing or recording, etc. on the other deck changes the deck counter mode to the other.

MEMORIZING THE SPECIFIC POINT

- This function is helpful to listen to the specific passage.

- At the desired point, press the MEMORY button to memorize.

MEMORY

- " MEMO" lights up and the specific point is memorized.
- If the FAST FORWARD or the REWIND button is pressed in the stop mode, winding the tape stops at the memorized point.
- To cancel, press this button or open the corresponding cassette door.
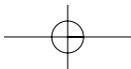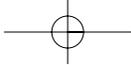
Troubleshooting Guide

If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or our service organization.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	• The AC input cord is disconnected. • The POWER switch is not pressed completely.	• Connect the cord securely. • Press the POWER switch to ON.
No sound	• Unrecorded tape is loaded. • Incorrect connections. • Incorrect operation of the amplifier.	• Load the recorded tape. • Make connections correctly. • Operate the amplifier correctly.
Distorted or abnormal sound	• Dirty head. • Incorrect selection of the Dolby NR system. • The tape is stretched or wrinkled.	• Clean the head. • Select the Dolby B NR or the Dolby NR OFF mode. • Replace the tape.
Vibrating sound	• Dirty capstans or pinch rollers. • The tape is irregularly wound.	• Clean the capstans or pinch rollers. • Wind the tape by advancing or rewinding rapidly.
Too noisy	• Magnetized head. • Poor connections.	• Demagnetize the head. • Check the connections and connect all cords securely.
Not recording	• The tabs have been removed. • Dirty head.	• Cover with the adhesive tape. • Clean the head.
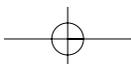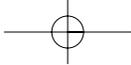
Specifications

• TYPE . . . . Stereo full logic double cassette deck with Dolby B NR system.

• Track system . . . . 4-track, 2-channel stereo
• Recording system . . . . AC bias system (bias frequency : 105 kHz)
• Erasing system . . . . AC system
• Tape speed . . . . 4.76 cm/sec. (1-7/8 ips)
• Heads
　Deck A . . . . 1 erasing head and 1 recording / playback head (rotating)
　Deck B . . . . 1 playback head
• Wow and flutter, unweighted CCIR/ARM . . . . 0.3 %
• Frequency response, - 20 dB recording / playback, Dolby NR OFF
　Normal . . . . 40 Hz ~ 12 kHz, $\pm$ 3 dB
　Chrome . . . . 40 Hz ~ 13 kHz, $\pm$ 3 dB
• Signal to noise ratio, weighted CCIR/ARM
　Dolby NR OFF, normal/chrome . . . . 43 / 45 dB
　Dolby B NR, normal/chrome . . . . 53 / 55 dB
• Line input sensitivity/impedance . . . . 400 mV / 63 k Ω
• Line output level/impedance . . . . 500 mV / 1.5 k Ω
• Total harmonic distortion, 333 Hz, 0 dB recording
　Normal . . . . 2 %
• Channel separation . . . . 40 dB

■GENERAL

　• Power supply . . . . 230 V ~ 50 Hz
　• Power consumption . . . . 14 W
　• Unswitched AC outlet . . . . Total 100 W max.
　• Dimensions (W x H x D) . . . . 440 x 141 x 250 mm (17-3/8x5-1/2x9-13/16 inches)
　• Weight(Net) . . . . 4.0 Kg (8.8 lbs)

Note : Design and specifications are subject to change without notice for improvements.